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D. F. VAN SLOOTEN

Obituary by

A. A. Pulle (Utrecht)

Dr Dirk Fok van Slooten, ex-director of the Royal Botanic Garden at Buitenzorg (Bogor) died on the 7th of March at Amsterdam.

Van Slooten was born on the 17th of March 1891 at Amersfoort, where he attended the primary school and the municipal "Gymnasium". The lessons in botany and zoology at the latter were at that time given by the author of this necrology. In 1910 van Slooten passed the matriculation examination and entered the State University at Utrecht, when he took botany and zoology as his major subjects. In 1913 he became a B.Sc. and in 1916 a M.Sc., whereas he obtained in February 1919 the D.Sc. by submitting a thesis entitled "Bijdrage tot de kennis der Combretaceeën en Flacourtiaceeën van Nederlandsch Indië" (A Contribution to our Knowledge of the Combretaceae and Flacourtiaceae of the Dutch East Indies). From 1914 to the end of 1918 he belonged to the Staff of the University Department of Systematic Botany.

Two months after he obtained his doctor's degree he went to Java, where he was appointed Botanist at the Herbarium and Museum of the Botanic Garden at Buitenzorg. He remained in this position until 1931, when he became Keeper of the Herbarium. This function he retained until the Japanese occupation of the Dutch East Indies in March 1943 made an end to it. In 1934/1935 he was for 10 months acting director of the Botanic Garden, and from 1940 to 1943 he held the same function. During the Japanese occupation he was interned in a camp, but after the war he was reinstated in his function of Keeper of the Herbarium, and on the 1st of January 1949 he was appointed Director of the Royal Botanic Garden of Indonesia, as the Botanic Garden at Buitenzorg then was called. On the 1st of February 1950 he was succeeded in this function by Mr Kusnoto M.Sc. (Agr.), but he remained attached to the Garden as Advisor until the 1st of February 1952 when he retired. Already in the beginning of 1951 he had returned to the Netherlands, and after his retirement he enjoyed the hospitality of the Royal Tropical Institute at Amsterdam, where he continued his study of the family Dipterocarpaceae.

Van Slooten occupied in the Dutch East Indies many functions. For six years he acted as lecturer at the Dutch East-Indian Veterinary School at Buitenzorg, for a number of years he was president of the section Buitenzorg of the Royal Physical Society (Koninklijke Natuurkundige Vereniging), and from 1933 to the Japanese occupation chairman of the Dutch East-Indian Natural History Society (Nederlandsch-Indische Natuurhistorische Vereniging). Since 1933 he also held a number of important functions in the Rotary Club; in 1948/1949 he was acting governor of a district of the Rotary International.

Van Slooten's scientific interest was at first turned towards the Flacourtiaceae, Combretaceae and Stylidiaceae, but after a short time he specialized himself in the Malesian Dipterocarpaceae, on which he published several papers. It is a great pity that this work remains incomplete. Special mention deserves his "Geillustreerd Handboek der Javaansche Theeonkruiden en hun Beteekenis voor de Cultuur" (Illustrated Handbook of the Javan Tea-weeds and their Significance for the Tea Culture), which he edited in collaboration with C. A. Backer.

Van Slooten was a sedate and extremely conscientious worker, who did not publish his results unless he was fully convinced of their accuracy.

His firm and courageous attitude during the first months of the Japanese occupation deserves to be commemorated. At that time there was an acute danger that the direction of the Garden would be entrusted to fully unqualified persons, who would have been a willing instrument in the hands of the Japanese soldiery, but owing to van Slooten's vigourous protests this was prevented, and the direction was left in his hands until the arrival of the Japanese botanists. During that time he was also very active in behalf of the families of the interned European employees of the Garden, whose circumstances were often very difficult on account of the freezing of their deposits.

RAPID CHROMOSOME METHODS

by

Hans H. Pfeiffer (Bremen)

To-day one of the tasks of taxonomy is to detect the biological species that occur in nature, and as the biological isolation mechanisms are detected almost exclusively by means of cytogenetical investigation, cytogenetics has become one of the irreplaceable auxiliaries of modern botanical taxonomy (11). On the occasion of the 75th birthday of our most honoured G. Tischler (on June 22, 1953) I beg to make some remarks on this subject, in particular on Traub's recent article in this journal (18).

The use of cytogenetics in taxonomy is not always a simple procedure, so one often has to confine himself to examination of the chromosome complement of the classified material (15, 16, 17). For that reason Traub (18) has given a report on his new rapid chromosome methods using arabinic acid or the metal arabinates. They are said to be preferable because with them it is not necessary that the mounts are made later. However, in my opinion all the many existing methods (9, 8, 5) have turned out well, and I should not like to renounce them. Techniques of unravelling several pinch-preparations have succesfully been applied either without heating (2, 14) or by the use of Heitz' heating method (6, 7) or of one of the modifications of the latter introduced by Whitaker (20) or by Warmke (19). Lately the technique has still further been perfected, and it is now possible to obtain in this way permanent chromosome mounts of the root-tips or of other meristematic parts of the plant (3, 20, 19).

In some cases maceration methods (1) are also suitable for making chromosome mounts. In comparison with the well-tried methods collected by Geitler (5) and the valuable Gentiana violet stain proposed by Oehlkers (10) Schweizer's "universal rapid method" (13) with dioxyhematein chrome lac, does not seem to be of superior value, especially if it is applied in the recommended way after fixation with a mixture of picric acid, formaldehyde, methyl alcohol, chloroform and acetic acid. I doubt whether there is a need for the introduction of new methods so long as their indubitable superiority is not demonstrated. This seems the less necessary since we now have the possibility of applying the variable phase microscopy (11) introduced by H. Osterberg and collaborators (4). A micoid disk, applied instead of the ordinary diffraction plate, together with a rotable analyzer and polarizer for polarized light constitute the essential elements of his apparatus. Often the contrast is already increased by polarizing the transmitted light (12). After all, the purpose of such a system, variable from zero to one, is to obtain a continuous variation either in the phase difference or in the amplitude ratio or in both, and to adjust the microscope for optimum, bright or dark, contrast for many different objects (4). It will, of course, be most interesting to learn whether Traub's new methods (18) will prove true in combination with Osterberg's phase microscopy in polarized light (4).

But let me not conclude these remarks without pointing once more to the international depository of cytological slides created by the International Union of Biological Sciences. This organization invites cytologists to send part of the slides used for their publications to the Carnoy Institute in Louvain, Belgium (Administrator of the depository: Prof. P. Martens). It is desirable that those parts of the mounts that are thought to be especially demonstrative

or that actually are figured in the publication, should be marked, as clearly as possible, on the slides, and also that a reprint of the published paper is added. The slides will remain the property of the depositors, but may be studied in the depository (the CARNOY Institute) by all those who are interested in them.

Labor. f. Polar.-Mikroskopie, Bremen I, Wilhelmstrasse 7.

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An argument for retaining Article 44 of the International Code unchanged

by

JOSÉPHINE TH. KOSTER (Leiden)

In Taxon 2(2):17-19, a plea was made by Mr. J. W. G. Lund for an addition to Art. 44 in the following sense: when describing new *algal* taxa, one should not be compelled to use the Latin language, but should be free to write the diagnosis in one of three modern languages: English, French or German. Why not Chinese, Italian, Japanese, Portuguese, Russian or Spanish? It is always the same old question. The reading of "Report of Proceedings", Fifth International Botanical Congress, Cambridge, 16—23 Aug., 1930, p. 582—590, may be recommended.

Mr. Lund points out the difficulties caused by various reasons to make a satisfactory Latin diagnosis for a number of (most unicellular) Algae, so that it be possible to obtain a clear idea of such a species and to distinguish it from the allied ones. The same may hold true in case the diagnosis is to be made in a modern language for those who are not familiar with that language. Art. 44 leaves the author free to make the Latin diagnosis as short or as long as he likes. In those cases where the Latin language, though rich in possibilities of expression, does not provide the word equivalent of a modern conception, a more detailed diagnosis in any language can be added. For a long time this has been done. Moreover, for such *Algae* as are meant here, good figures are essential, and they are independent of the language in which the diagnosis is written.

Algae that may be placed in the plant as well as in the animal kingdom, such as mentioned by Mr. Lund, cannot cause any difficulties when the author of a new species of this sort gives a decision about its classification. In that case he has only to follow the rules of Nomenclature of the kingdom in which it is placed. When he does not give a decision about the place of the organism and it does not belong to a botanical genus, then the Code of Botanical Nomenclature

is not appropriate to that new organism, and the author not even bound to give a diagnosis at all.

The Bacteria being excepted in Art. 44 are also omitted in one of the most fundamental Rules, Art. 23, where the starting points for the groups of plants are treated. They seem to be excluded from the Code and therefore certainly cannot be used as a good object for comparison with the Algae.

The fact that a number of Algologists did not give Latin diagnoses for their new species cannot prove the inaptitude of Art. 44, since according to Mr. Lund only two of them gave their opinions which speak for themselves. When we take the International Code serious, the here meant species have to be validated by Latin diagnoses. This will belong to the task of future Monographers.

The plea for keeping Article 44 unaltered has been made here for the sake of simplicity of the Code (Art. 3) by avoiding another exception.

Let not the Algologists be dissident, but let them co-operate in this essential point to keep uniformity in taxonomical botany.

Nomenclature of *Premna obtusifolia* R. Br.

by

F. R. Fosberg (Falls Church, Va.)

A discussion of the case of the name *Premna integrifolia* L. may serve to clear up the confusion surrounding this widely used binomial, to indicate the correct name for the complex species to which it is applied, and to direct attention to the consequences of some of the provisions of Article 73 of the New Code of Botanical Nomenclature.

The widespread species of *Premna* of the western Pacific has usually been called *P. integrifolia* L. It is quite variable and many individuals and regional facies belonging to it have been described as species and given names. Such are the bases of most of the names commonly referred as synonyms to *P. integrifolia* or equivalents. It is quite likely that, when an intensive study of the local variation of this group is made, some of these will be found to represent definable entities of varietal rank. It is even possible that more than one species may be represented. But for the present, until more objective and generally recognizable criteria are elucidated, it seems convenient to regard it as a single widespread polymorphic species, as has been done by many authors. Most of these have used for it the name *Premna integrifolia* L., although Schauer, in D. C. Prodr. 11:632. 1847, who first united *P. integrifolia* L. with *P. serratifolia* L. (including also *Cornutia corymbosa* Burm. f.) chose the name *P. serratifolia.*

Serious confusion first arose concerning the nomenclature of this aggregate when Merrill, Int. Rumph. Herb. Amb. 450—451. 1917, pointed out that *Premna integrifolia* L., *P. serratifolia* L. and *Cornutia corymbosa* Burm. f. were based on the same material, adding that, for these, *Premna corymbosa* (Burm. f.) Rottl. & Willd. is the correct name. Apparently here was the first use of this combination, based on Burmann's name and erroneously ascribed to Rottler and Willdenow. Though Miquel is mentioned as having used it, Miquel actually did not, though he may have regarded Rottler's name as a transfer of the epithet of Burmann. Merrill regarded *Cornutia corymbosa* (incl. *P. integrifolia* and *P. serratifolia)* as distinct from the widespread strand species, for which he considered *P. obtusifolia* R. Br. as the earliest name.

Fletcher, Notes Roy. Bot. Gard. Edinb. 19:177-178. 1936, wrote an article attempting to clarify the nomenclature of this group. He was apparently unaware of Merrill's discussion. He decided that *Premna corymbosa* (Burm. f.) Rottl. & Willd. was the correct name for the group, but like Merrill, was wrong in assuming that *P. corymbosa* Rottl. was based on *Cornutia corymbosa* Burm. f.

Meeuse, Blumea 5:72-73. 1942 uses the name *P. corymbosa* (Burm. f.) Rottl. & Willd., giving synonymy and discussion. In this discussion he points out, as had Merrill and Fletcher, that *P. integrifolia* L. is based on the earlier *Cornutia corymbosa* Burm. f. and that *P. serratifolia* L. and *P. foetida* Riv. ex Bl. are synonyms.

Moldenke, in his "Preliminary list of invalid and incorrect names proposed in the *Verbenaceae* and *Avicenniaceae*", p. 47. 1941, lists *P. corymbosa* (Burm. f.) Miq. as an incorrect name for *P. integrifolia* L. In his "An alphabetic list of invalid and incorrect scientific names proposed in the *Verbenaceae* and *Avicenniaceae*", p. 37. 1942, he refers the same combination to *P. corymbosa*

(Burm. f.) Rottl. & Willd. In the 1947 supplement to this he refers *P. corymbosa* Rottl. and *P. corymbosa* Willd. to *P. corymbosa* (Burm. f.) Rottl. & Willd.

Examination of Miquel's Flora Indiae Bataviae 2:894. 1856, shows that Miquel did not make a combination *P. corymbosa,* but does use *P. corymbosa* Rottl., citing *Cornutia corymbosa* Burm. f. in synonymy. By inference it may be supposed that he thought Rottler had made a new combination based on Burmann's name.

Rottler, Neue Schr. Ges. Naturf. Fr. Berl. 4:187. 1803, actually described a new species, *P. corymbosa,* making no reference to *Cornutia corymbosa* Burm. f., but contrasting his plant with *P. integrifolia* L. Willdenow, in a footnote to the paper which he edited for the missionary, Rottler, contrasts the four species of *Premna* known to him, not mentioning the Burmann plant either. Obviously neither had in mind making a new combination, but were publishing a new species, based on Rottler's plant from India. Of course, it is possible, (though from the description, not probable) that *P. corymbosa* Rottl. could be identical with the widespread species under discussion. Nomenclaturally, however, it is based on a different type and makes illegitimate any later binomial in *Premna* based on *Cornutia corymbosa.*

The fact that *P. integrifolia* was, when published, superfluous, since it was based on *Cornutia corymbosa,* a legitimate name, makes it necessary to examine the other early synonyms to determine their availability.

The other name published simultaneously with *P. integrifolia* is *P. serratifolia* L. This is based on *Cornutioides* L. Fl. Zeyl. 195. 1747, which is also the basis for *Cornutia corymbosa* Burm. f. Therefore, *P. serratifolia* was equally a superfluous name when published, and therefore also illegitimate.

The next name of the many commonly referred to this group is *P. obtusifolia* R. Br. Prodr. Fl. N. Holl. 512. 1810. There seems to be no obstacle to the use of this name, which is based on a plant from the shores of tropical Australia preserved in the Banks Herbarium (now in the British Museum, Natural History). This was the conclusion of Merrill, Int. Rumph. Herb. Amb. 450-451. 1911, who was not bothered by *P. corymbosa,* but by the fact that *P. integrifolia* and *P. serratifolia* were based on the same type as *Cornutia corymbosa,* which he regarded as a different species.

The essential synonymy of *Premna obtusifolia,* in its broadest sense, is as follows:

Premna obtusifolia R. Br. Prodr. Fl. N. Holl. 512. 1810.
Cornutioides L., Fl. Zeyl. 195. 1747.
Cornutia corymbosa Burm. f. Fl. Ind. 132. 1768.
Premna integrifolia L. Mant. 2: 252. 1771.
Premna serratifolia L. Mant. 2: 253. 1771.
Premna corymbosa (Burm. f.) Rottl. & Willd. ex Merrill, Int. Rumph. Herb. Amb. 450-451. 1917 (non Rottl. 1803).

In addition to this there is a tremendous incidental synonymy, here referred mostly on taxonomic grounds. In Moldenke's "An alphabetic list of invalid and incorrect scientific names proposed in the *Verbenaceae* and *Avicenniaceae* . . .", 1-56, New York 1942, are listed forty six names that are referred to species that belong here, and in the supplement (1947) are six more. These will not be enumerated here, as they are not essential for present purposes, and their types must be examined before final disposition of them can be made with safety.

The case discussed above provides opportunity to emphasize two nomenclatural points that have not always been given serious enough attention. One is that nomenclature must be based on specimens and documentary evidence, not on assumption—i.e., it was not correct to assume that Rottler was making a transfer of Burmann's *Cornutia corymbosa* to *Premna* simply because he used the epithet *corymbosa.* A great deal of confusion was caused by this assumption. The other point is the full implication of Article 73 of the new Code. *Premna integrifolia* and *P. serratifolia,* familiar Linnean names, are illegitimate *because they were superfluous when published.* It seems a safe prediction that, because the meaning and application of this Rule have not been fully appreciated by nomenclaturists since Briquet's time, many more names will fall in the same way. It would even seem advisable to consider revision or deletion of this article or parts of it. The alternative is to focus attention on its application and to get the changes over with and to avoid disregarding this Rule in the future.

It might, therefore, be well, before the congress in Paris, if some opinions were expressed on the desirability of eliminating the provision from Article 73 regarding names superfluous when published. If it were considered that less future changes would result from abandoning this Rule, the matter should, at least, be discussed.

Propositions pour améliorer le Code de la Nomenclature

Proposition n. 4 soumise au Congrès de Paris

par

CHARLES BAEHNI (Genève)

Il y aura toujours des botanistes qui chercheront à perfectionner le Code international jusqu'au jour où le système naturel et définitif du règne végétal aura été élaboré jusque dans ses moindres détails, c'est-à-dire, probablement, jusqu'au jour du Jugement Dernier. D'autres se contenteront du Code qu'ils possèdent et se borneront à en améliorer la forme, ou, éventuellement, à en perfectionner certaines parties devenues insuffisantes à cause des progrès de la science.

C'est à ce dernier groupe que je voudrais me rattacher, m'étant peu à peu assuré qu'il vaut mieux posséder un Code imparfait et pouvoir s'y fier parce qu'il est stable plutôt que d'en avoir un toujours plus parfait, mais toujours changeant. On trouvera donc dans les lignes qui suivent quelques remarques qui tendent à améliorer la forme, plus rarement le fond (Art. 13), mais on y chercherait en vain des modifications qui changeraient le sens des anciennes règles. Je suis convaincu, au surplus, qu'il est du devoir des botanistes d'essayer loyalement d'appliquer le Code sans vouloir le transformer à chaque cas nouveau. Les juges qui appliquent le Code pénal en demandent-ils la révision si le prévenu dont ils examinent le cas à commis des actes qui ne sont pas exactement prévus par le Code? Non, évidemment, mais il exercent leur imagination, ils emploient leur science, ils jugent par analogie. Les botanistes n'ont pas de raison d'en faire autrement: Code en main, qu'ils jugent par analogie!

Voici les quelques exemples, glanés au cours de la traduction française du texte anglais, où il m'a paru qu'on pouvait dire les mêmes choses d'une autre façon.

Art. 13

"Thus subfamily (subfamilia) denotes a category between a family and a tribe, subtribe (subtribus) a category between a tribe and a genus, etc.".

Il est évident, ici, que les langues anglaise et française s'expriment de façons différentes. Néanmoins, il semble (et avant d'écrire ce qui suit, j'ai pris l'avis compétent d'un traducteur anglais des Nations Unies, M. F. Fuller) que l'anglais pourrait exprimer plus clairement l'idée contenue dans cet article. Je m'explique: entre une famille ("a family") quelconque mais déterminée, et une tribu ("a tribe") quelconque, mais déterminée, il n'y a pas de place pour *une catégorie,* mais seulement pour *une sous-famille déterminée,* portant un nom approprié; en revanche, il y a entre la catégorie famille et la catégorie tribu, de la place pour *la catégorie sous-famille.* En d'autres termes, entre Légumineuses („une famille") et Viciées („une tribu"), il n'y pas de place pour *une catégorie,* mais il y en a pour *la sous-famille des Papilionacées.*

En français, la distinction est facile: il suffit de supprimer l'article et dire: Ainsi, sous-famille désigne une catégorie intermédiaire entre famille et tribu, etc., pour qu'on comprenne qu'il s'agit d'un concept général. Il paraît qu'on peut, en anglais, rendre exactement le sens si l'on remplace „a" par „the", ce qui donnerait:

"Thus subfamily (subfamilia) denotes a category between the family and the tribe, subtribe (subtribus) a category between the tribe and the genus, etc.

C'est le texte que je me permets de proposer.

Art. 20

"The nomenclatural type of an order or of any taxon of a rank between order and family is the family whose name is based on the same generic name, that of a family . . . is the genus on whose name that of the taxon concerned is based . . ."

Exemples:

Pariétales, Pariétacées, Paries
Caryophyllales, Cariophyllacées, Caryophyllum
Ebenales, Ebenacées, Ebenum

Il est évident qu'il faut inclure une restriction dans le corps de l'Article qui pourrait se présenter comme suit:

„Sauf exceptions figurant dans la liste des nomina conservanda, le type nominal d'un ordre . . . est la famille dont le nom est fondé sur le même nom générique."

Art. 23

„Valid publication is treated as beginning . . . at the following dates".

„Une" publication valide ne peut pas com-

mencer à une date fixée arbitrairement, à moins que ce soit celle de sa naissance: le moment où l'ouvrage sort de presse. „La publication valide", expression prise dans un sens général, ne peut pas commencer du tout: La publication est valide ou bien elle ne l'est pas; si elle l'est, c'est dès son commencement à elle, et non à partir d'une certaine date. Dirait-on: Mon passeport valide a commencé le 1er mars? ou encore: Tous les passeports valides se termineront le 31 décembre? Evidemment non. On dira: La validité de mon passeport a commencé le 1er mars, ou: La validité de tous les passeports expirera le 31 décembre. Je propose donc:

„The validity of publication is treated as beginning ... at the following dates ..."

Ou le texte adopté pour la version française:

„Une publication est tenue pour valide à partir des dates suivantes ..."

Même article, un peu plus loin:

„The nomenclature of Fossil Plants ... begins with the year 1820". Ce n'est pas vrai, elle a commencé bien avant. Ainsi, ouvrant au hasard Scheuchzer, Naturhistorie d. Schweizerlandes 2: 206. 1752, j'y trouve *Rapa in lignum mutata*, p. 207. *Siliquastrum minimum vibratum*, etc.

Les noms de plantes fossiles existaient comme chacun sait avant 1820. Ici, on convient d'un point de départ de la nomenclature valide; alors, il faut dire: *„Pour tous les groupes de plantes fossiles, la validité de la nomenclature commence avec l'année 1820."* Au fond, c'est le même problème qu'au début de l'article.

Art. 33 § 3 et Art. 34 § 3

„The specific epithet, when adjectival in form ... agrees in gender with the generic name"

„Epithets of subspecies and varieties ... agree in gender with the generic names".

Dans la plupart des grammaires françaises, on lit que les adjectifs s'accordent en genre *et en nombre* avec des substantifs auxquels ils se rapportent. Ici, seul le genre est mentionné. Si le nombre va de soi, pourquoi ne pas dire: Les épithètes s'accordent avec le nom générique? Ou bien, pour être complet:

Les épithètes s'accordent en genre et en nombre avec le nom générique?

Sinon, nous pouvons écrire, la conscience tranquille parce que les textes nous y autorisent:

Trifolium stellatum (n. sing.) forma *nana* (n. pl.).

Ou encore:

Trifolium stellata (n. pl., en accord avec l'Art. 33) *forma nana* (n. pl., en accord avec l'Art. 34). Est-ce vraiment ce latin-là que nous autorisons?

Rec. 42 A

„From 1 Jan. 1953 onward, botanists are recommended to discontinue the practice of validating new binomials ..."

Je recommande surtout de supprimer „From 1 Jan. 1953 onward", car ces mots n'ont aucun sens. Une recommendation n'a pas force de loi et si les botanistes ne s'y conforment pas, il n'y aura pas de sanctions. Il est donc parfaitement inutile de fixer une date à partir de laquelle on recommande aux botanistes d'abandonner certaines habitudes. Inutile et un peu ridicule.

Art. 43 (examples)

„Cotema Britt. & Wils. ... is a nomenclatural synonym of Spirotecoma".

Dans le cas des Art. 33 et 34, les règles pèchent par excès de discrétion. Ici, au contraire, elles pèchent par excès tout court. Synonyme, d'après Littré „se dit d'un mot qui a, à très peu près, le même sens qu'un autre". Il s'agit de mots, et il ne peut s'agir que de mots. Que vient faire là-dedans „nomenclatural"? A mon avis, il ne fait qu'introduire une notion fausse, à savoir qu'il existerait d'autres synonymes possible que les synonymes verbaux: par exemple, des types synonymes, des espèces synonymes ou des genres synonymes. Je crois que nous sommes tous d'accord sur le fait que non seulement ces expressions seraient vicieuses, mais que la forme de pensée qu'elles recouvrent n'est pas du domaine de la nomenclature. Si j'ai dû employer dans la traduction française du Code les mots: „synonyme nominal", c'est pour rester fidèle au texte anglais, mais bien contre mon gré. „Synonyme nominal" est une monstruosité tautologique qui doit être remplacée dans le Code par „synonyme" tout court.

Art. 53 (Deuxième §)

„In the absence of proof to the contrary, the date given in the work ... must be treated as correct".

Ce paragraphe doit être supprimé. Il répète en moins bien, la seconde phrase de l'Art. 40.

Rec. 58 A

Je ne vois pas en quoi la teneur de cette Rec. serait moins importante que celle de

l'Art. 58, et par conséquent pourquoi on en a fait une Rec. et non un Art. Dans l'Art. 58 et la Rec. 58 A, les deux cas traités sont différents et on ne peut pas dire que l'un puisse être subordonné à l'autre, ni que le cas prévu dans la Rec. puisse être réglé par l'Art.

Dans ces conditions, la tendance allant vers la simplification (n'a-t-on pas vu déjà disparaître apud?), pourquoi ne pas fondre les deux Articles 58 et Rec. 58 A en un seul? On aurait alors:

„Art. 58 Si un nom a été proposé, mais non publié validement par un premier auteur et si ce nom est ensuite publié validement avec une description par un second auteur qui l'attribue au premier ou encore si un nom a été publié avec description ou avec renvoi à une description, par un premier auteur dans l'ouvrage d'un second, les deux noms d'auteurs doivent être cités et reliés par le mot in (ou ex, je n'ai pas de préférence). *Il en va de même pour les noms d'origine horticole qu'on cite avec la mention „Hort.".*
(fin de l'Art. à supprimer).

Ce qui compte, après tout, ce n'est pas de savoir à qui incombe la responsabilité, mais bien de savoir où trouver la description. La recherche des responsabilités appartient au systématicien; elle peut et doit échapper au bibliographe et au nomenclateur.

Rec. 60 G

„If a generic name ... is valid"

Selon l'Art. 10, le mot „valid" s'applique seulement à publication. Un nom générique ne peut donc être valide; il peut être légitime ou correct. Je propose de remplacer valide par *légitime.*

Art. 65 (exemples)

„The specific epithet of Pinus mertensiana Bong. was transferred to Tsuga by Carrière ...". Il y a là une impossibilité matérielle et par conséquent, une expression erronée. Carrière n'a jamais transféré une épithète, mais bien une espèce d'un genre dans un autre.

Il faut donc dire:

„Le Pinus mertensiana Bong. a été transféré par Carrière dans le genre Tsuga, mais cet auteur, comme il ressort de sa description appliqua par erreur la nouvelle combinaison, Tsuga mertensiana ..."

Art. 69

Même remarque que pour la Rec. 60 G. Remplacer, à la 3e ligne *„first valid name"* par *„first legitimate name".*

Il me paraît, au surplus, que la rédaction complète de cet article est à revoir. Je sais bien que chaque science a son jargon particulier, mais dans un Code qui doit être lu par tout le monde, il faut réduire au minimum ce qui peut paraître étrange. Ne peut-on pas exprimer mieux, par exemple. *„The type specimen of a state must bear that state"?*

Ou encore *„his binomial ... is not to be regarded as a transfer".* Je suis sûr que c'est parfaitement clair pour les mycologues. Je suis moins sûr (mais là je m'avance sur un terrain où je n'ai aucune compétence et je serais ravi que mes collègues anglais m'infligent un démenti) que la façon de le dire soit la meilleure possible.

Art. 73

„A name is illegitimate in the following cases:

1) *If it was nomenclaturally superfluous when published".*

Ce qui est certainement „superfluous" c'est le mot „nomenclaturally". Il s'agit d'un nom superflu. Comment pourrait-il être *nominalement* superflu? Y a-t-il d'autres manières d'être superflu pour un nom? Sommes-nous menacés de voir apparaître „taxonomically superfluous" ou autres déviations de la pensée et du langage? J'ai supprimé ce mot dans la version française. Que n'en fait-on autant dans le texte anglais?

Art. 76

„A name of a taxon must be rejected if its characters ..."

Je me demande s'il n'y aurait pas moyen d'indiquer que les caractères sont ceux du taxon et non ceux du nom? En outre, peut-on parler d'un taxon si l'ensemble décrit est composé d'éléments hétérogènes? C'est justement parce qu'il ne s'agit pas d'un taxon que le nom doit être abandonné. Ecrivons mélange, groupe hétérogène, je ne sais quoi, mais pas taxon.

Rec. 82 F

„New specific (or other) epithets should be written".

Si je comprends bien, „specific (or other)" désigne toutes les sortes d'épithètes. Alors, pourquoi ne pas dire plus simplement *„New epithets should be written"?*

Transliteration of greek words for use in nomenclature in botany

Proposal no. 5 submitted to the Paris Congress

by

R. E. Buchanan (Ames, Iowa)

A large proportion of the names of taxa of higher plants are derived from Greek words, as are also many specific and other epithets. Under the rules of the Botanical Code these are transliterated and treated as Latin words.

There is no rule or recommendation in the International Code of Botanical Nomenclature which defines the exact procedure for the transliteration of Greek words into Latin. Yet it is true that throughout the history of modern botany there has been the tacit assumption that classic precedent as established by the Latins should be followed. Linnaeus in the *Critica Botanica* (in the translation by Sir Arthur Hort) states:

"Moreover, in every age, it has been the recognized practice amongst all Botanists, and even among the most eloquent Romans in ancient times, by Pliny and others, to write Greek names in Roman letters. When Greek names are transliterated into Latin, the equivalents used by the Romans from all time must be adopted in representing the Greek letters."

Linnaeus himself at least twice outlined the "classic" rules for such transliterations and gave examples of good form. However, an examination of the names of taxa and of the epithets proposed in botany shows that in practice there exists a degree of variation in transliteration that has led to confusion and misunderstanding. In general the variations and non-conformities may be attributed to three causes at least.

(1) The number of letters in the alphabet is not the same in Latin as in Greek. The Greek has four consonants not found in Latin. The Latins used one letter for long o and short o and one for long e and short e. The Greeks used two letters for each. Strict transliteration of Greek diphthongs into the Latin does not always yield a Latin diphthong. There are other problems as well.

(2) In a few cases the Latins themselves recognized two alternative transliterations.

(3) There is manifest in some cases a tendency on the part of authors to be influenced by the techniques of transliteration of the Greek into modern languages. These often do not conform to classic Latin usage.

There are many nomenclatural difficulties that arise from faulty or confused transliteration. One results when two different Latin transliterations of the same Greek word are introduced into the literature of botany as names or epithets applied to the same organism, or are proposed for names applied to different taxa. The determination of the gender of generic names may be made obscure by poor transliteration.

Neither of the lists of examples of classical transcriptions published by Linnaeus was complete. No specific directions are included in the "International Code of Botanical Nomenclature" as adopted by the Seventh International Botanical Congress: indeed Article 7 specifies only that scientific names of taxa when taken from a language other than Latin are to be treated as though they were Latin, and Recommendation 82 A suggests the appropriate transliteration of the *spiritus asper*.

In order to obviate unnecessary confusion in the coining of new names and epithets, it is proposed that Recommendation 82 A be replaced, and that a suitable Appendix be approved outlining the more important classical rules for Greek-Latin transliteration.

The Proposals follow:

1. It is proposed that Recommendation 82A be rescinded. This recommendation reads: "When a new name is derived from a Greek word containing the *spiritus asper* (rough breathing), this should be transcribed as the letter *h*."

2. It is proposed that a new Recommendation 82A be approved, reading as follows: "When a new name of a taxonomic group or a new epithet for use in botany is to be derived from the Greek, the transliteration (transcription) to Latin form should conform to classic usage. To assist authors of such new names and epithets in interpreting good usage it is recommended that the directives of Appendix .... be used as guides."

3. It is proposed that the following "Draft Proposal" for an Appendix to the "International Code of Botanical Nomenclature" be studied by the appropriate Committees of the International Association for Plant Taxonomy, and when suitably amended, be approved for inclusion as the Appendix to which reference is made in the new Recommendation 82A as given above.

Greek Α, α (alpha) *Latin* A, a

ἄκανθος — *acanthus* — *Acanthus*

The Greek *α* is the first letter of two diphthongs

αι = ae αἰγίλωψ = *aegilops* — *Aegilops*

Rarely and less correctly it is transliterated *αι* — *ai* as in αἶρα — *aira*. There is no Latin diphthong ai. — *Aira*

Occasionally the Greek sequence *αι* — *ai* occurs, as in Μάϊος — *Maius*, in which *αι* is not a diphthong — *Maianthemum*

Occasionally *αι* — *ae* has been incorrectly transliterated as *e*, as αἷμα — *haema* with *Hematoxylon* for *Haematoxylon*

αυ — *au* αὖλαξ — *aulax* — *Aulax*

ἁ — *ha* ἅβρός — *habrus* — *Habranthus*

αἷ — *hae* αἷμα — *haema* — *Haemanthus*

Greek Β, β (beta) *Latin* B, b

βάλανος — *balanus* — *Balanocarpus*

Greek Γ, γ (gamma) *Latin* G, g

γῆ — gē — *Geaster*

When the Greek *γ* precedes *γ*, *κ*, *ξ*, or *χ*, it is transliterated as *n*.

γγ — *ng* as in ἀγγεῖον — *angium* — *Angiopteris*

γκ — *nc* as in ἄγκιστρον — *ancistrum* — *Ancistrocactus*

γξ — *nx* as in σφίγξ — *sphinx*

γχ — *nch* as in ἄγχουσα — *anchusa* — *Anchusa*

Greek Δ, δ (delta) *Latin* D, d

δάφνη — *daphne* — *Daphne*

Greek Ε, ε (epsilon) *Latin* E, e

ἔριον — *erium* — *Erianthus*

The Greek *ε* is the first letter of two Greek diphthongs.

ει — *i* θεῖον — *thium* — *Thiodictyon*

More rarely *ε* — *e* ζειά — *zea* — *Zea*

ευ — *eu* εὖ — *eu* — *Euchlaena*

ἑ — *he* ἑλίχρυσος — *helichrysus* — *Helichrysum*

Greek Ζ, ζ (zeta) *Latin* Z, z

ζύγον — *zygum* — *Zygophyllum*

Greek Η, *η* (eta) *Latin* Ē, ē

ἦρι — *eri* — *Erigeron*

Greek nouns ending in *η* are feminine. When transliterated they were placed in the first Latin declension, usually the ending *-e* was used, sometimes *-a*.

δάφνη — *daphnē* — *Daphne*

χαίτη — *chaeta* — *Spirochaeta*

ἡ — *he* ἥλιος — *helius* — *Helianthus*

Greek Θ, θ (theta) *Latin* Th, th

θάμνος — *thamnus* — *Thamnocalamus*

Greek Ι, ι (iota) *Latin* I, i

ἴον — *ium* — *Iochroma*

ἱ — *hi* ἵππος — *hippus* — *Hippurus*

Greek Κ, κ (kappa) *Latin* C, c

κάλαμος — *calamus* — *Calamagrostis*

The Greek *κ* is sometimes incorrectly transliterated as *k*.

κινητός — *cinetus* — *Kinetostigma*

Greek Λ, λ (lambda) *Latin* L, l

λευκός — *leucus* — *Leucophyllum*

Greek M, μ (mu) *Latin* M, m

μικρός — micrus — *Micranthemum*

Greek N, ν (nu) *Latin* N, n

νάρδος — nardus — *Nardus*

Greek Ξ, ξ (xi) *Latin* X, x

μύξα — myxa — *Myxophyceae*

Greek O, o (omicron) *Latin* O, o

ὀμφαλός — omphalus — *Omphalia*

In Greek, *o* is the first letter of two diphthongs.

οι — oe *οἶνος — oenus* — *Oenanthe*

ου — u *πούς — pus* — *Rhizopus*

In the Greek, final *-ον* usually indicates a neuter noun or adjective. When such words were transliterated they were placed in the second Latin declension, usually with the ending *-um*, occasionally *-on*.

ἄνθεμον — anthemum — *Helianthemum*

δένδρον — dendron — *Clerodendron*

In the Greek, final *-ος* is a masculine nominative ending for nouns and adjectives; when transliterated, words with this ending were placed in the second Latin declension, usually with the ending *-us*, occasionally *-os*.

ἄδελφός — adelphus — *Philadelphus*

καρπός — carpos — *Symphoricarpos*

The ending *-ος* is also found in Greek genitives. When transliterated these words were placed in the third Latin declension, usually with the ending *-is*, occasionally *-os*.

στέμματος — stemmatis — *agrostemmatis*

ἐρυσίπελατος — erysipelatos — *erysipelatos*

ὁ — ho *ὅρμος — hormus* — *Hormodendrum*

Greek Π, π (pi) *Latin* P, p

πλάτυς — platys — *Platycodon*

Greek P, ρ (rho) *Latin* R, r

ῥῆον — rheum — *Rheum*

In composition, when the second component begins with *ῥ* and the preceding component ends in a vowel, the *ρ* is doubled, and the second retains the *spiritus asper*, *ῥῥ - rrh*, as in

ἀντι + ῥινον — ἀντίῤῥινον — antirrhinum — *Antirrhinum*

Greek Σ, σ ς (sigma) *Latin* S, s

στάχυς — stachys — *Stachys*

Greek T, τ (tau) *Latin* T, t

τέτρα — tetra — *Tetradymia*

Greek Y, υ (upsilon) *Latin* Y, y

μῦς, μυός — mys, myos — *Myosotis*

The Greek *υ* is the second letter of three diphthongs.

αυ — au *αὖλαξ — aulax* — *Aulax*

ευ — eu *εὐγενία — eugenia* — *Eugenia*

ου — u *οὐρά — ura* — *Hippurus*

ὑ — hy *ὕδωρ — hydor* — *Hydrophyllum*

Greek Φ, φ (phi) *Latin* Ph, ph

φλόξ — phlox — *Phlox*

In a few Latin transliterations there is an alternative *φ — f* as *φάσηλος — phaselus* or *faselus*.

χρυσός — chrysus	*Greek X, χ* (chi) *Latin* Ch, ch	*Chrysanthemum*
ψεῦδος — pseudus	*Greek Ψ, ψ* (psi) *Latin* Ps, ps	*Pseudotsuga*
πώγων — pogon	*Greek Ω, ω* (omega) *Latin* O, ō	*Pogonia*

Family Names

Proposal no. 6 submitted to the Paris Congress

by

Antonio Ponce de León y Aymé and Maria Teresa Alvarez (La Habana)

Ampliación del Art. 28 del Código Internacional de Nomenclatura Botánica.

Considerando que el Código Internacional de Nomenclatura Botánica debe dar las normas precisas para la formación de los nombres que se establezcan de acuerdo con las Reglas:

Considerando que, no obstante el precepto general establecido para dar nombres a las familias, debido a contingencias inherentes al lenguaje, se hace neceseria cierta flexibilidad, dentro de la norma general formulada, lo que debe estar previsto para que las denominaciones de estos importantísimos taxa conserven la uniformidad requerida.

Vistas las irregularidades que se observan en la estructura de muchos de estos nombres, inclusive en los recomendados como *Nomina conservanda* en la última edición del Código.

Y dada la conveniencia de ir sustituyendo los nombres no integrados de acuerdo con las normas del Código que aún se usan por aquellos que estén formados siguiendo sus reglas Formulamos la siguiente:

Proposicion

Que sea ampliado y modificado el Art. 28 del Código (Sección 4, subsección 3), el cual deberá quedar redactado de la manera siguiente:

Art. 28

El nombre de una familia es un adjetivo en plural, usado como sustantivo, formado del nombre del género tipo de la familia con la terminación *aceae.*

A este efecto, se considerará, en general, como parte radical en el nombre genérico utilizado, toda la porción anterior a la última vocal de su sílaba final.

Amplification of Art. 28 of the International Code of Botanical Nomenclature.

WHEREAS, the International Code of Botanical Nomenclature should be the accepted standard for forming names:

WHEREAS, it is important that general classifications remain within the framework of accepted botanical terms and that provision be made to insure uniformity, nevertheless, because of inherent language difficulties, a certain flexibility with regard to family names should be allowed.

WHEREAS, certain irregularities in the structure of many botanical names exist, even in those recommended as *Nomina conservanda* in the last edition of the Code.

AND WHEREAS, it is advisable to consider the adoption of terms which have become correct through usage, although they are not in strict accordance with procedures set up in the Code: WE, THEREFORE, submit the following (recommendation) (resolution):

Proposal

THAT Article 28 of the Code (Sect. 4, subsect. 3) be amplified as follows:

Art. 28

The family name is to be an adjective in the plural form, ending in *aceae,* used as a noun, and is to be formed from the name of the type genus.

In general, the root of the generic name used is to be considered as that portion of the word preceding the final vowel.

Ejemplos.

*Ros*aceae	de *Rosa*
*Mor*aceae	de *Morus*
*Meli*aceae	de *Melia*
*Euphorbi*aceae	de *Euphorbia*
*Elatin*aceae	de *Elatine*

Para evitar cacofonía o para que no resulten palabras inadecuadas, se tendrá en cuenta las siguientes variantes:

a) Cuando el nombre del género tipo termine en *r*, se considerará íntegramente como radical.

Ejemplos

*Aster*aceae	de *Aster*
*Papaver*aceae	de *Papaver*
*Piper*aceae	de Piper

b) Cuando el nombre del género tipo termine en *s* precedida de *a* o de *i*, en la sílaba final, se cambiará la *s* en *d*.

Ejemplos

Cyca*d*aceae	de Cyca*s*
Irida*d*aceae	de Iri*s*
Lecythida*d*aceae	de Lecythi*s*
Juglanda*d*aceae	de Juglan*s*

No debe, por tanto, decirse Haloragaceae sino Haloragidaceae, siendo el género tipo Haloragis; ni debe decirse Hydrocharitaceae sino Haloragidaceae, siendo el género tipo es Hydrocharis.

c) Cuando el nombre genérico tomado como tipo termine en *x*, se cambiará ésta por *c*.

Ejemplos

Salicaceae	de Salix
Styracaceae	de Styrax
Olacaceae	de Olax

d) Cuando el nombre del género tipo termine en *ago*, se cambiará la *o* en *in*.

Ejemplos

Borag*in*aceae	de Borago
Plumbag*in*aceae	de Plumbago

e) Cuando la sílaba final del nombre genérico tipo exista una *i* que al aplicar esta regla produzca cacofonía, podrá suprimirse ésta.

Ejemplo

Nyctaginaceae	de Nyctagini*a*

1. Los siguientes nombres, sancionados por el uso, se considerarán como excepciones: Palmae, Gramineae, Cruciferae, Leguminosae, Guttiferae, Umbelliferae, Labiatae, Compositae y Papilionaceae o Papilionatae.

Examples.

*Ros*aceae	from *Ros*(a)
*Mor*aceae	from *Mor*(us)
*Meli*aceae	from *Meli*(a)
*Euphorbi*aceae	from *Euphorbi*(a)
*Elatin*aceae	from *Elatin*(e)

To avoid dissonance or deficient terminology, the following exceptions should be provided for:

a) A generic name ending in *r* should be considered in its entirety as being the root.

Examples

*Aster*aceae	from *Aster*
*Papaver*aceae	from *Papaver*
*Piper*aceae	from *Piper*

b) When a generic name ends in *s* preceded by *a* or *i* in the last syllable, the *s* should be changed to *d*.

Examples

Cyca*d*aceae	from Cyca*s*
Irida*d*aceae	from Iri*s*
Lecythida*d*aceae	from Lecythi*s*
Juglanda*d*aceae	from Juglan*s*

Therefore, the word should be Haloragidaceae instead of Haloragaceae, since the genus is Haloragis; and Hydrocharidaceae instead of Hydrocharitaceae from the genus Hydrocharis.

c) In generic names ending in *x*, the *x* should be changed to *c*.

Examples

Salicaceae	from Salix
Styracaceae	from Styrax
Olacaceae	from Olax

d) In generic names ending in *ago*, the *o* should be changed to *in*.

Examples

Borag*in*aceae	from Borago
Plumbag*in*aceae	from Plumbago

e) To avoid dissonance, when the root of a generic name ends in *i*, it may be dropped.

Example

Nyctaginaceae	from Nyctagini*a*

I. The following names, which have been accepted by usage, shall be considered as exceptions: Palmae, Gramineae, Cruciferae, Leguminosae, Guttiferae, Umbelliferae, Labiatae, Compositae, and Papilionaceae or Papilionatae.

Los botánicos, sin embargo, procurarán usar preferentemente los nombres apropiados, terminados en *aceae,* conforme a las reglas. En estos casos, podrán situar a los mencionados, entre paréntesis, a continuación, como sinónimos.

2. Los nombres formados de acuerdo con las reglas basándose en un sinónimo, especialmente si es de un género prelinniano cuyo nombre haya perdurado, deben ser mantenidos (como *nómina conservanda)* pero no debe servir de norma para dar nombre a una familia basarse en un nombre genérico que ha pasado a la sinonimia.

NOTAS: El caso de Papilionaceae o Papilionatae, debe incluirse en las excepciones generales procurando sustituirse, como a todos.

El párrafo final (2) explica por que se han suprimido las palabras *o de un sinónimo* de la parte general de este artículo.

Botanists, however, should try to give preference to the correct names ending in *aceae,* according to the rules, and in the above cases also give the cited form in parentheses as a synonym.

2. Generic names formed according to rule from a synonym, especially those of pre-Linnaean derivation still in use today, should be preserved as *nomina conservanda,* but should not be used to establish family names.

NOTE: Papilionaceae or Papilionatae must be included among the general exceptions, and an effort should be made to employ the correct form as in other cases.

The final paragraph (2) explains why the words *or from a synonym* have been deleted from the main part of this article.

Some nomina familiarum conservanda

Proposal no. 7 submitted to the Paris Congress

by

Antonio Ponce de León y Aymé and Maria Teresa Alvarez (La Habana)

Proposicion a.

HYDROCHARIDACEAE, de Hydrocharis L., en lugar de Hydrocharitaceae.

Se funda en que la *s* final del nombre genérico debe cambiarse en *d* y no en *t* al formarse el nombre de la familia. Asi puede verse en Cyca*d*aceae, de Cyca*s*, en Lecythy*d*aceae de Lecythi*s*, en Orchi*d*aceae de Orchi*s*, etc.

Proposicion b.

MELASTOMACEAE, de Melastoma L., en lugar de Melastomataceae.

Se funda en que no hay razón para intercalar la silaba *ta* antes del sufijo *aceae.*

Proposicion c.

PTERIDACEAE, de Pteris L., parte de la antigua y heterogénea familia Polypodiaceae, que debe separarse como familia independiente.

Proposicion d.

ZAMIACEAE, de Zamia L., parte de la compleja familia Cycadaceae, que debe ser separada como familia independiente.

Proposal a.

HYDROCHARIDACEAE, from Hydrocharis L., instead of Hydrocharitaceae.

Based on the fact that the final *s* of a generic name should be changed to *d* (not *t*) when forming the family name, such as in Cyca*d*aceae from Cycas, Lecythy*d*aceae from Lecythis, and Orchi*d*aceae from Orchis, etc.

Proposal b.

MELASTOMACEAE, from Melastoma L., instead of Melastomataceae.

Based on the fact that there is no reason to insert the syllable *ta* before the suffix *aceae.*

Proposal c.

PTERIDACEAE, from Pteris L., should be considered as an independent family, since it is part of the former heterogenous family Polypodiaceae.

Proposal d.

ZAMIACEAE, from Zamia L., should be considered as a separate family, since it is part of the complex family Cycadaceae.

Proposicion e.

PHASEOLACEAE, de Phaseolus L., en lugar de Papilionaceae.

Se funda en que no existiendo el género Papilio, Papilion o Papiliona, resulta absurdo utilizar este nombre para formar el de una familia aplicando una regla que exige precisamente partir del nombre de un género: hacerlo significa destruir la autoridad del Código.

El género Phaseolus, cuyo nombre es precisamente el que recibe en griego la Judia, o frijol (beans), es el tipo natural del taxon a que pertenece y el más importante y el más conocido: es, por tanto, el que debe utilizarse para darle nombre a la familia.

No interferimos con esto al nombre Fabaceae, pues este se emplea para todas las antiguas Leguminosas, mientras que Phaseolaceae comprende sólo a las de flores dorsiventrales, hojas imparipinnadas y embrión curvo, es decir, excluyendo a las Caesalpinaceae y a las Mimosaceae.

Proposal e.

PHASEOLACEAE, from Phaseolus L., instead of Papilionaceae.

Based on the fact that there is no genus Papilio, Papilion, or Papiliona, it is absurd to form a family name according to a rule which precisely requires such names to be formed from a genus root. This practice destroys the authority of the Code.

The genus Phaseolus, which is Greek for *bean,* is the natural classification group to which it belongs, also being the most important and the best known one, and, therefore, the one that should be used to name the family.

This does not interfere with the name Fabaceae as applied to all former Leguminosae (Legumens), since Phaseolaceae would apply only to those of dorsiventral flowers, imparipinnate leaves and curved embryo, meaning that it would exclude Caesalpinaceae and Mimosaceae.

Proposal to conserve the generic name *Citrullus* Schrader

Proposal no. 8 submitted to the Paris Congress

by

F. R. Fosberg (Falls Church, Va.)

For about 175 years the name *Citrullus* Forsk. was accepted without question for the watermelon and its close relatives. Then Hara, Bot. Mag. Tokyo 56: 4, 1948, pointed out that two other names, *Anguria* Mill., 1754, and *Colocynthis* Ludw., 1757, have priority over *Citrullus* Forsk., 1775, and suggested conserving the latter.

Hara recognized that *Citrullus* Forsk. had no generic description and that to it were assigned three species. He regards two of these as actually belonging to other genera and considers that this fact makes *Citrullus* a monotypic genus, when published, with a combined generic-specific description, that of *C. battich* Forsk., which he designates as the type species.

Actually the mere fact that, according to modern concepts, two of the three species do not belong to *Citrullus* does not make Forskäl's genus monotypic when published. Therefore, as it was not described by Forskäl, it may not be regarded as validly published. And, although *Citrullus battich* was considered a binomial by the compilers of the Index Kewensis, it is probable, from Forskäl's own usage, that he did not so regard it. *Battich* is merely the Egyptian vernacular name recorded by him for the plant described.

This proposal to conserve *Citrullus* Forsk. was combined with other proposals by various Japanese botanists in an undated printed pamphlet and submitted to the Congress at Stockholm in 1950. The question of *Citrullus* was assigned to me by the secretary of the Special Committee on Phanerogams for study, evaluation, and recommendation. The results of this study are, briefly, that:

(1) *Citrullus* Forsk. was not validly published, and therefore, in my opinion, cannot (and should not) be considered for conservation. It was not accompanied by a description or reference to a previously effectively published description (Code Art. 48, also 47). Since three species were included it is not possible to consider it to have a combined generic-specific description (Code Art. 50).

(2) Taking up *Anguria* Mill., 1754, would

lead to confusion because *Anguria* L., 1763, though a later homonym, has been widely used, even until very recently, for another genus of Cucurbitaceae.

(3) *Colocynthis* Ludw., 1757, is an unfamiliar name that has never been taken up. It is not described except by short descriptive headings in an analytical key.

(4) It would be desirable to conserve *Citrullus*, since it is in universal use for a widely cultivated and important economic plant.

This brings up the question of the possibility of conserving a name that was not validly published. Such names have no standing, whatever, in botanical nomenclature (Code, Art. 22), and I do not think that they can be conserved. If a name cannot be tied to a definite description there is always likely to be confusion about its application.

The logical course to be followed seems to be to conserve *Citrullus* as of its earliest publication accompanied by an unambiguous description, rejecting earlier synonyms and earlier usages of *Citrullus*, if any.

After Forskäl, the next publication of *Citrullus* seems to have been that of Necker in 1790. Here it was accompanied by a description, but not a very clear one, and without any species assigned to it. This name would be very difficult to typify except by assumption, because of the name, that Necker had *Cucurbita citrullus L.* in mind. This is not safe because of the occasional use of the vernacular name *citrul* or *citrulle* for the watermelon. He did not mention Forskäl and merely indicated that the genus included "Quaed. Cucurb. et Cucumer. Linn."

H. A. Schrader was apparently the next to use *Citrullus*. He used it in the binomial *Citrullus caffer* Schrad. in the Index Seminum Horti Academici Göttingensis in 1834. I have not seen this publication, but it probably does not contain any descriptive material, as a series of Annotationes to it was started in 1836, of which one number, only, was published before Schrader's death in 1836. In 1836, in Ecklon and Zeyher, Enumeratio plantarum Africae australis extratropicae, p. 279, Schrader published an excellent description of the genus, the application of which is not at all ambiguous. This is reproduced here, verbatim, as the publication is not to be found in most libraries:

"Flor. monoici. Masc. Cal. profunde quinquefidus. Cor. quinquepartita planiuscula. Stam. 5, basi corollae inserta saepius triadelpha semitriloba; lobis flexuosis margine antheriferis. Antherae lineares biloculares. Fem. Cal. et Cor. ut in mare. Stylus trifidus. Stigmata tria crassa subcordata. Fructus baccatus corticatus tri v. pseudo-sexlocularis polyspermis. Semina compressa margine obtusa. — Plantae herbaceae annuae. Cirrhi divisi. Folia multifide-lobata. Pedunculi uniflori; corollis flavis. Fructus carne aquosa vel solida alba rarius (Citr. vulgaris) rubra."

For a copy of this description I am indebted to Mrs. Alice F. Tryon, of the Missouri Botanical Garden, as the publication is not available in Washington.

Schrader does not refer to any earlier use of the name *Citrullus* excepting his own binomial of 1834. It is clear that *Citrullus vulgaris* Schrad. should be selected as the type, as it is based in *Cucurbita citrullus* L. This species and *C. caffer* Schrad. are here assigned to the genus.

In 1836, also, *Citrullus chodospermus* Fal. & Dun. was published in the Bulletin de la Société Centrale d'Agriculture, Hérault, vol. for 1836, p. 264. I have not been able to find this publication, so cannot be positive that no generic description is given, in which case the priority would have to be checked.

In 1838, an excellent diagnosis, essentially the same as the 1836 one, was published in the Reliquae Schraderianae, Linnaea 12: 412, with four well-described species, assigned to it, and in the same year, Spach took up Schrader's name in his Histoire Naturelle des végétaux, vol. 6, pp. 212-213, with three or four species, providing a good description. In neither of these publications is there any reference to Forskäl or Necker, or any other earlier author except Schrader, nor are any synonyms given.

If *Citrullus* is to be conserved it would be advisable to adopt the 1836 publication by Schrader, and to reject *Citrullus* Necker, as well as *Anguria* Mill. and *Colocynthis* Ludw. I hereby propose that this be done. This suggestion has already been made to the Special Committee for Phanerogams and Pteridophytes.

The essential synonymy involved here is as follows:

Anguria Mill., Gard. Dict. Abr. ed. 4, 1: [83] AN. 1754 (non L. 1763), *nom. rejic. propos.* (type: *Anguria citrullus dicta* C. Bauhin, Pinax).

Colocynthis Ludwig, Inst. Regn. Veg. ed. 2.

139. 1757, *nom. rejic. propos.* (untypified, as no species were included).

Citrullus Forsk., Fl. Aeg. Arab. 167. 1775, being invalidly published does not need to be rejected.

Citrullus Necker, Elem. Bot. 1: 240, 1790. *nom. rejic. propos.* (untypified, as no species were included).

Citrullus Schrader, in Ecklon & Zeyher, Enum. Pl. Afr. Austr. Extratrop. 279. 1836, *nom. cons. propos.* (type: *C. vulgaris* Schrad.)

Proposals to the Paris Congress

Proposal no. 9

Proposal for the conservation of the generic name **Oidium** Sacc. (ut 'Link p.p.'), Michelia 2: 15, 1880 (Fungi Imperfecti, states of Erysiphaceae) *versus: Oidium* Link ex Fr., Systema Mycologicum 3: 427, 1832 and *Acrosporium* Nees ex Gray, Nat. Arr. Brit. Pl. 1: 552, 1821.

Oidium Sacc. (generally cited as *'Oidium* Link' or *'Oidium* Link em. Sacc.').

Adopted by all modern works dealing with taxonomy or plant pathology of mildew fungi including Salmon's Monograph (1900), Blumer, Erysiphaceae Mitteleuropas (1933), Rabenhorst Krypt. Flora, 2 Aufl., Clements & Shear, Genera of Fungi (1931), Phytopathology, Review of applied Mycology, British Mycological Society. Many species, cosmopolitan; practically all those with perfect states unknown have only *Oidium* names.

Type species: Saccardo cited 'Exempl. *O. erysiphoides* Fr., *O. Tuckeri* Berk.' *O. tuckeri*, the familiar oidium of the vine, is proposed as lectotype.

Oidium Link ex Fr. was applied to different sorts of fungi but Fries' specified type *Mucor leprosus* L., which he made a synonym of *O. aureum* Link ex Fr. (Fungi Imperfecti, saprophytic).

Adopted in part by Sumstine, Mycologia 5 : 48 (1913), by Linder, Lloydia 5 : 165 (1942), and Bessey, Morphology and Taxonomy of Fungi (1950; but he used *Oidium* also for states of Erysiphaceae).

Acrosporium Nees ex Gray, conidial Erysiphaceae.

Adopted by no one except Sumstine (Mycologia 5: 58 (1913) for 10 species.

Type species: *A. monilioides* Nees ex Gray.

Argument: Fries (1832) included 3 conidial Erysiphaceae in *Oidium*. Mycologists continued to use *Oidium* for these fungi, and plant pathologists have used no other name. There is much literature in which the name is used. Oidium, oïdium, and oidio have become common names. Conservation of *Oidium* Sacc. would make current usage legal.

Oidium Link ex Fr. had scarcely been used since 1885 until Linder revived it in 1942, nearly all mycologists having followed Saccardo in using (wrongly) the name *Rhinotrichum*. The fungi are of small importance and in any event *Oidium* Link ex Fr. should evidently be replaced by the earlier *Acladium* Link ex Pers., Mycol. Eur. 1: 28 (1822). (See Trans. Brit. mycol. Soc. 35: 236, 1952).

Proposed by G. R. Bisby, C.M.I., Kew.

Proposal no. 10

For the sake of scientific research, for mycology, and for botany, which demand stability of nomenclature, I propose to international taxonomists the following principles:

(1) That typification of genera by lectotypes implies generic emendation, which in turn implies revision of the genus and its allies so that the full consequence of the proposed lectotype can be seen; (2) that any such typification without the necessary revision should be rejected.

Argument: The proposals are an amplification of paragraph 4 of Appendix 1 to the International Rules of Botanical Nomenclature, as adopted at the seventh International Botanical Congress. It emphasizes what is so often overlooked, especially in connexion with lower plants, that many of the nomenclatorial problems are caused by lack of knowledge of the organisms, which no amount of static typification will improve.

Original publication: Nature 168: 1031. 1951.

Proposed by: E. J. H. Corner (Cambridge, Gt. Britain).

Nomenclature Committees

Committee for Bacteria

At the present time the Committee is composed of the following members each of whom has agreed to serve and consider the problems which may become the attention of the Committee for the forthcoming Paris Congress.

Chairman: Prof. O. N. Allen, Department of Bacteriology, University of Wisconsin, U.S.A.

Members: Prof. John Ramsbottom, British Museum (Natural History), London, Great Britain.

Prof. R. E. Buchanan, Room 24, Curtiss Hall, Iowa State College, Ames, Iowa, U.S.A.

Prof. T. Wiken, Institute f. Bakteriologie und Gärungsbiologie. Eidg. Techn. Hochschule, Universitätsstrasse 2, Zürich, Switzerland.

Dr S. T. Cowan, National Collection of Type Cultures, Central Public Health Laboratory, Colindale Avenue, London N.W. 9, Great Britain.

Dr R. S. Breed from Geneva, N.Y. has promised to serve as an ex officio member.

The Committee will probably meet at the Sixth International Congress for Microbiology, Rome, September 6-13, 1953.

Special Committee for Phanerogams and Pteridophyta

The Secretary, Prof. R. Pichi-Sermolli regrets to announce that the following members resigned from the Subcommittee for Phanerogams:

Dr Armando Dugand, Bogota, Colombia.
Prof. H. Weimarck, Lund, Sweden.

Special Committee for Fungi

Disposition of Nomina Generica Conservanda for Fungi

To the list of approved proposals reported in Taxon **2**: 29-31. 1953 may be added:

Tricholoma (Fr.) Kummer, Führer Pilzk. 25. 1871. — T.: *Agaricus flavovirens* A. & S. ex Fr., Syst. Mycol. **1**: 41. 1821 (cf. *A. equestris* Fr., Elench. Fung. **1**: 6. 1828). *Tricholoma* Benth. in DC., Prodr. **10**: 426. 1846. — T.: *T. elatinoides* Benth. l.c.

Donald P. Rogers

8e CONGRÈS INTERNATIONAL DE BOTANIQUE
8th INTERNATIONAL CONGRESS OF BOTANY

PARIS (France) : 2-14 Juillet-July 1954

Le Congrès se tiendra *à Paris du Vendredi 2 au Mercredi 14 Juillet 1954.* Le *logement* sera assuré dans toutes les conditions désirées, depuis les plus confortables (grands hôtels) jusqu'aux moins onéreuses (logements scolaires).

Des *excursions générales* et des *excursions spécialisées* auront lieu avant, pendant et après le Congres. — Avant le Congrès (à partir du 15-20 Juin): en Afrique du Nord, Languedoc, Alsace, Lorraine, Nord, Bretagne, Normandie, Vendée, Guyenne, Landes, Pays Basque, Région Parisienne. — Pendant le Congrès (2-14 Juillet): à Paris et autour de Paris (Versailles, Fontainebleau, Chantilly, etc. . . .). — Après le Congrès (15-22 Juillet): entre Paris et Nice, par la Bourgogne, le Jura, les Alpes, la Provence, le Massif Central, ou les Pyrénées. — Un *Post-Congrès* de 4 ou 5 jours aura lieu à Nice (22 au 25-26 Juillet) et sera suivi d'excursions aux Iles d'Hyères,

The Congres will be held in *Paris from Friday the 2nd to Wednesday the 14th of July 1954. Lodging* will be guaranteed according to wishes, in the most comfortable conditions (big hotels) to the most modest (school dormitories).

General excursions and *special excursions* will take place before and after the Congress. Before the Congress (from 15th to 20th of June): North-Africa, Languedoc, Alsace, Lorraine, Nord, Britanny, Normandy, Vendée, Guyenne, Landes, Basque country and Paris area. During the Congress (2nd to 14th of July): Paris and around Paris (Versailles, Fontainebleau, Chantilly, etc. . . .). After the Congress (15th to 22nd of July): from Paris to Nice via Burgundy, Jura, the Alps, Provence, Massif Central and the Pyrenees. A *Post-Congress* of 4 or 5 days will take place at Nice (22nd to 25th-26th of July); it will be followed by excursions to the Hyères Is-

en Corse, en Afrique Tropicale (Sénégal et Mauritanie) et en Afrique Equatoriale (Côte d'Ivoire et Guinée).

Le Congrès comportera, en plus des séances plénières et des séances de „sujets divers", surtout des *séances consacrées à des sujets limités d'intérêt actuel, discutés en forme de Colloques.*

Les séjours à Paris et à Nice comporteront de plus beaucoup d'autres pôles d'attraction et d'intérêt. De nombreuses *publications,* en français et en anglais, seront remises aux congressistes avant, pendant et après le Congrès.

Il est prévu que la *cotisation* sera *probablement* de 5.000 Frs (ou £ 5. ou $ 15.) avec tarif réduit pour les étudiants et les personnes accompagnant les membres du Congrès.

Prière instante de faire connaître ces informations, notamment dans les périodiques et journaux scientifiques! Pour la correspondance, s'adresser au:

lands, Corsica, Tropical Africa (Sénégal and Mauritania) and to equatorial Africa (Ivory Coast and Guinea).

The Congress will include, besides the plenary sessions and the sessions on "various subjects", chiefly *sessions devoted to limited subjects of actual interest discussed in the form of Symposia.*

The stay in Paris and in Nice will include as well many other poles of attraction and interest. Numerous *publications,* in French and in English, will be presented to the members before, during and after the Congress.

The probable amount of the subscription will be 5.000 francs (or £ 5 or 15 dollars), with a reduced fee for students and persons accompanying members.

You are earnestly requested to supply these informations, notably through scientific publications! All correspondence should be addressed to:

SECRETARIAT GENERAL DU 8e CONGRES INTERNATIONAL DE BOTANIQUE
292, RUE SAINT-MARTIN - PARIS (3e) - FRANCE

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A. E. T. F. A. T.

SECOND PLENARY MEETING

at

OXFORD

29 September—2 October, 1953.

On the invitation of Mr. A. C. Hoyle, accepted at the first Plenary Meeting at Brussels in Oct. 1951, the second Plenary Meeting will be held at Oxford from 29 September—2 October, 1953, under the Presidency of Mr. A. W. Exell.

A detailed programme will be sent at a later date to those members of A.E.T.F.A.T. who are attending. It is proposed that the programme will consist mainly of a symposium on the distribution of plants in Tropical Africa, besides other papers of special interest. There will also be a business meeting. On 3rd October it is hoped to organise visits to the British Museum (Natural History) and the Royal Botanic Gardens, Kew.

DEUXIÈME RÉUNION PLÉNIÈRE

à

OXFORD

29 septembre—2 octobre, 1953.

Sur invitation de Mr. A. C. Hoyle, acceptée lors de la première réunion plénière à Bruxelles en octobre 1951, la deuxième réunion plénière aura lieu à Oxford du 29 septembre au 2 octobre 1953 sous la présidence de Mr. A. W. Exell.

Un programme détaillé sera envoyé ultérieurement aux membres de l'A.E.T.F.A.T. qui comptent participer à cette réunion. Cette dernière consistera principalement en un symposium sur la distribution des plantes en afrique tropicale, en plus d'autres questions d'intérêt particulier. Des séminaires seront également organisés. En outre, la visite du British Museum (Natural History) et des Royal Botanic Gardens de Kew est prévue pour le 3 octobre.

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The International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht — Netherlands.

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Members are requested to pay their membership fees to the regional treasurers.

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TAXON

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